Roll no. 240801163 Name: Keerthibalan G

Ex. No.: 1 **Date:** 26/9/24

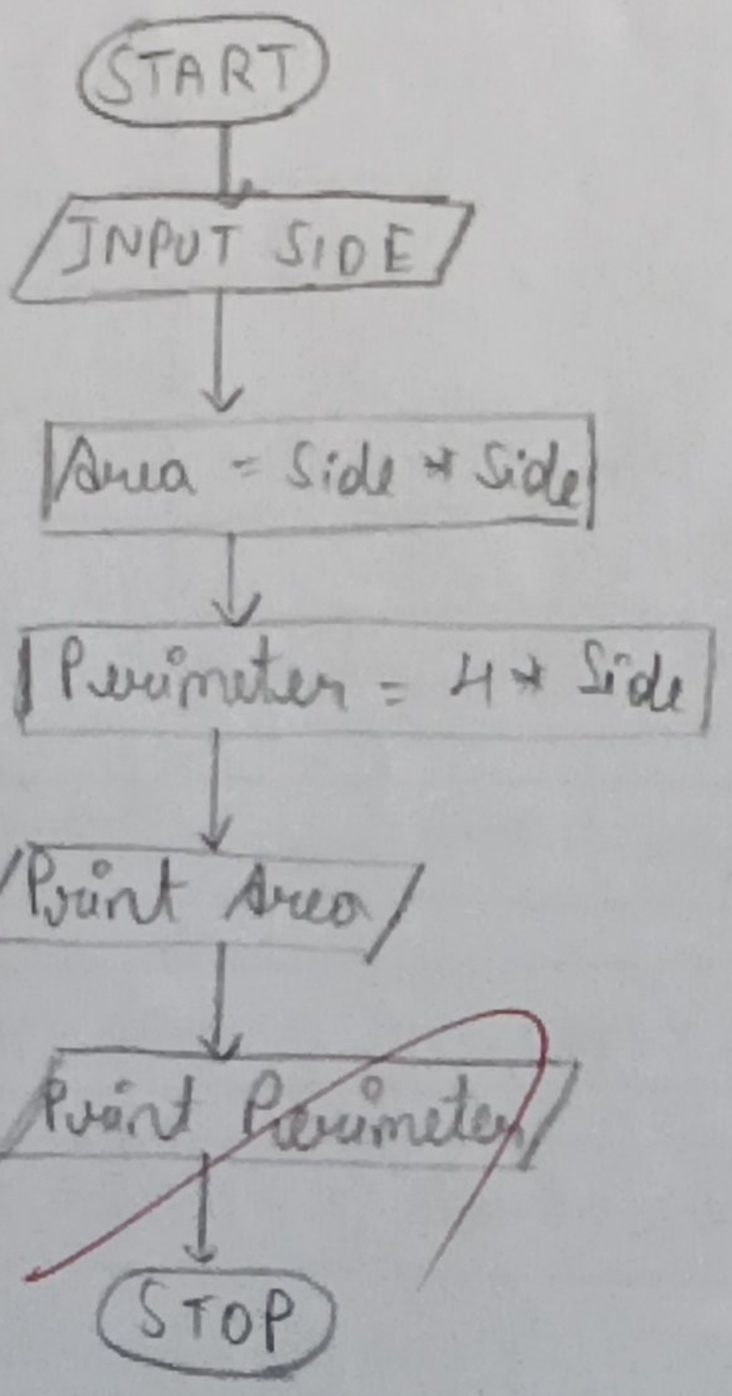
Calculate Area and Perimeter

Write an Algorithm and draw a Flowchart to Calculate the area and perimeter of a square.

Algorithm:

STEP 1: START
STEP 2: INPUT Side
STEP 3: Area = Side * Side
STEP 4: Perimeter = 4 * Side
STEP 5: Output Area (or) print Area
STEP 6: Output Perimeter (or) print Perimeter
STEP 7: STOP

Flowchart:



26/9/24

Roll no.: 240801163 Name: Keerthibalan G

Ex. No.: 2 **Date:** 26/9/24

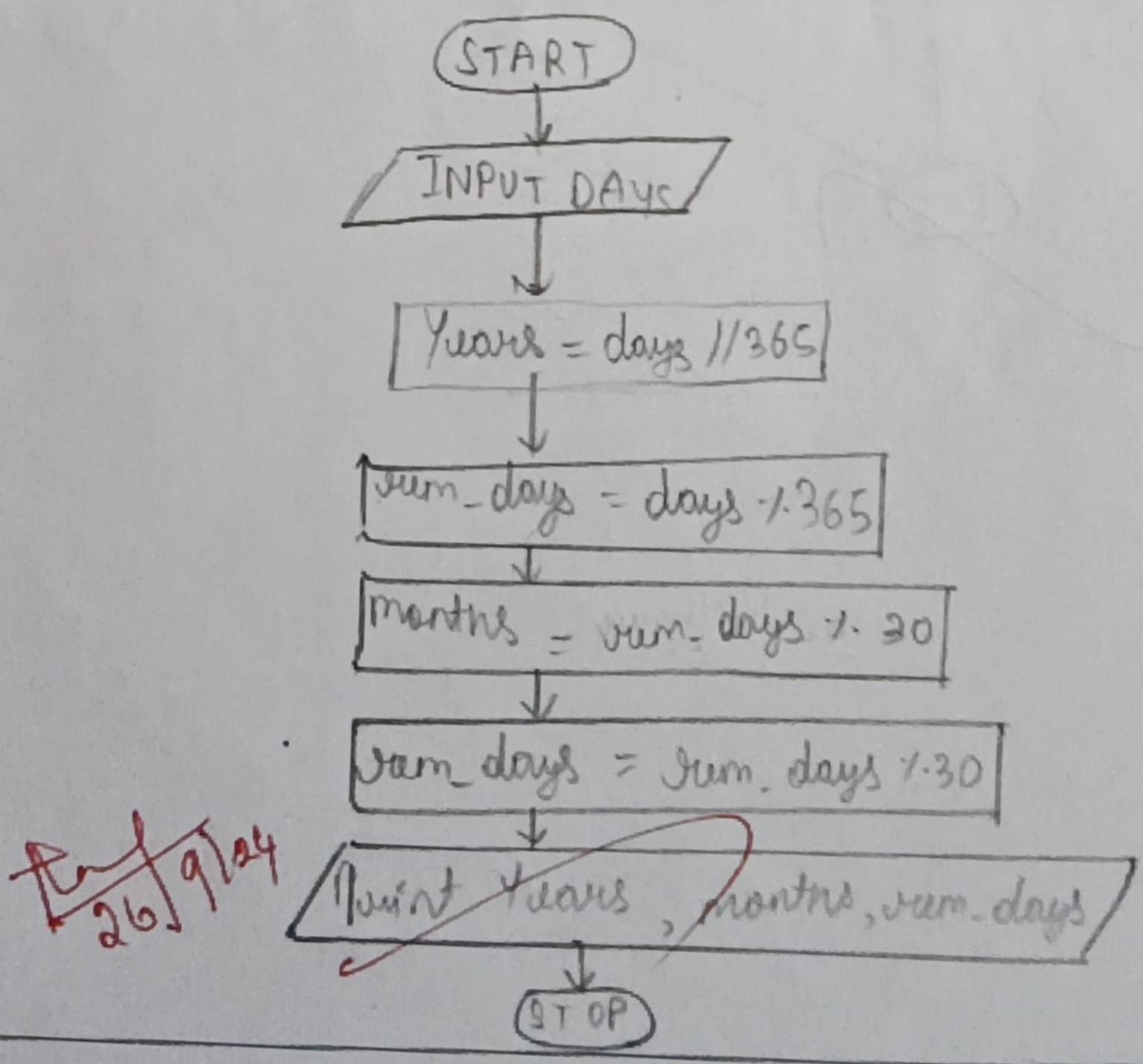
Days to Year Conversion

Write an Algorithm and draw a Flowchart to convert the given days into years & months.

Algorithm:

STEP 1: START
STEP 2: INPUT DAYS
STEP 3: Years = days // 365
STEP 4: rem_days = days % 365
STEP 5: months = rem_days // 30
STEP 6: rem_days = rem_days % 30
STEP 7: print Years, months, rem_days.
STEP 8: STOP

Flowchart:



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Roll No.: 2408011163 Name: Keerthibalan G

GE23131 - Programming Using C

Ex. No.: 3 **Date:** 26/9/24

Prime Number

Write an Algorithm and draw a Flowchart to check whether the given number is Prime or not.

Algorithm:

STEP1 : START

STEP2: INPUT VALUE_N

STEP3: S_1 = VALUE_N %. 2 S_2 = VALUE_N %. 3 S_3 = VALUE_N %- 7

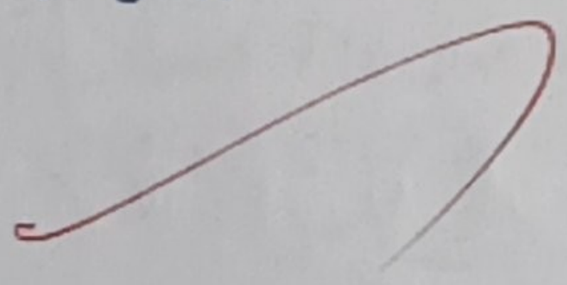
STEP4: If S_1 = 0 (or) S_2 = 0 (or) S_3 = 0 L = Prime

STEP5: ELSE L = composite

STEP6: PrintL

STEP7: STOP

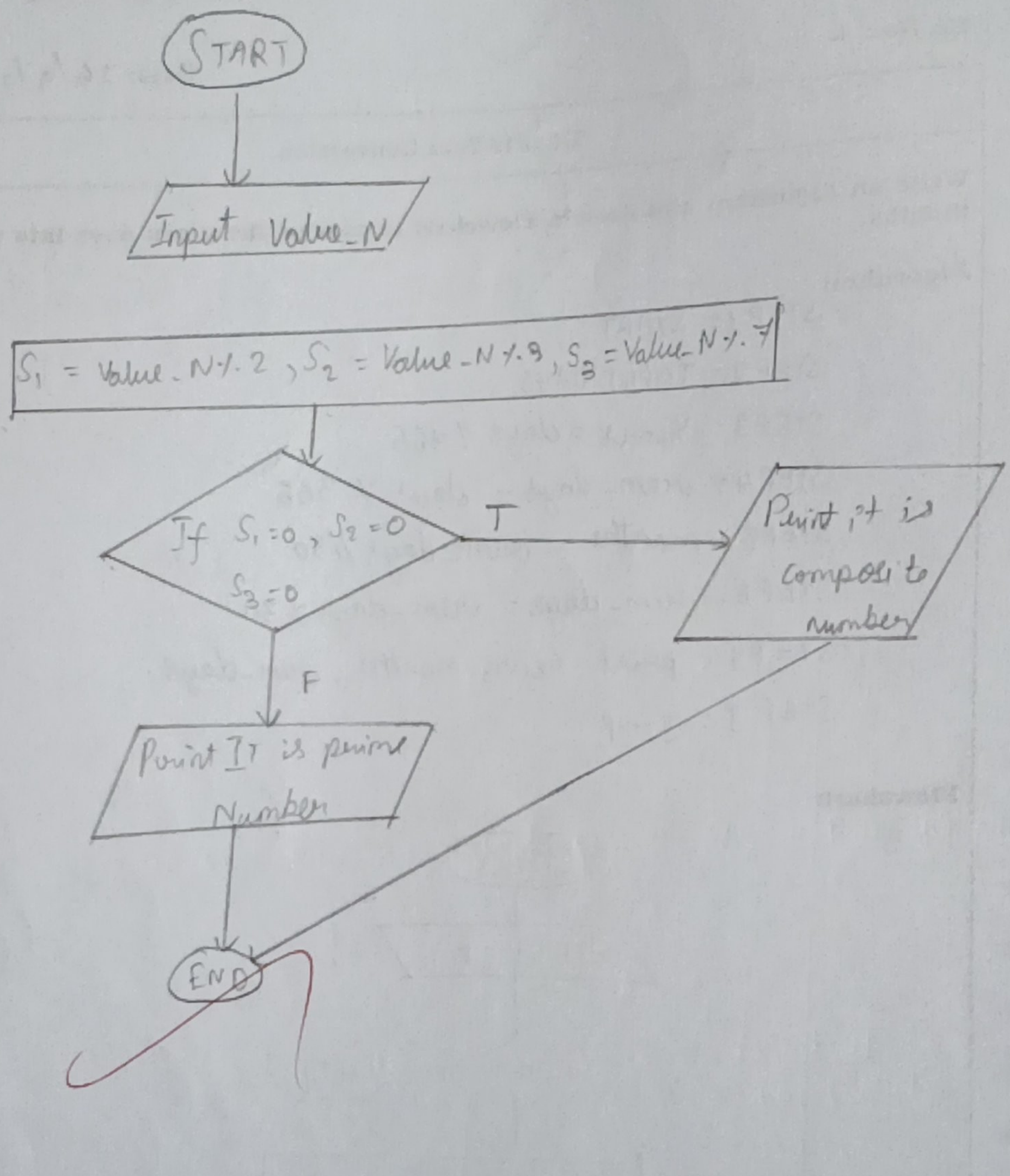
Flowchart:



26/9/24

Roll.no. 2408011163

Name : Keerthibalan G



Roll no.: 240801169 Name: Keerthibalan G

Ex. No.: 4 Date: 28/9/24

Leap Year

Write an Algorithm and draw a Flowchart to check whether the given year is Leap year or not.

Algorithm:

STEP 1: START

STEP 2: INPUT Y

STEP 3: If Y%.4==0 go to Step 4 else Print Y is not leap year

STEP 4: If Y%.100==0 go to Step 5 else Print Y is leap year

STEP 5: If Y%.400==0 go to Step 8

STEP 6: Print Y is a leap year

STEP 7: Print Y is not a leap year

STEP 8: Print Y is not a leap year

STEP 9: Print Y is not a leap year

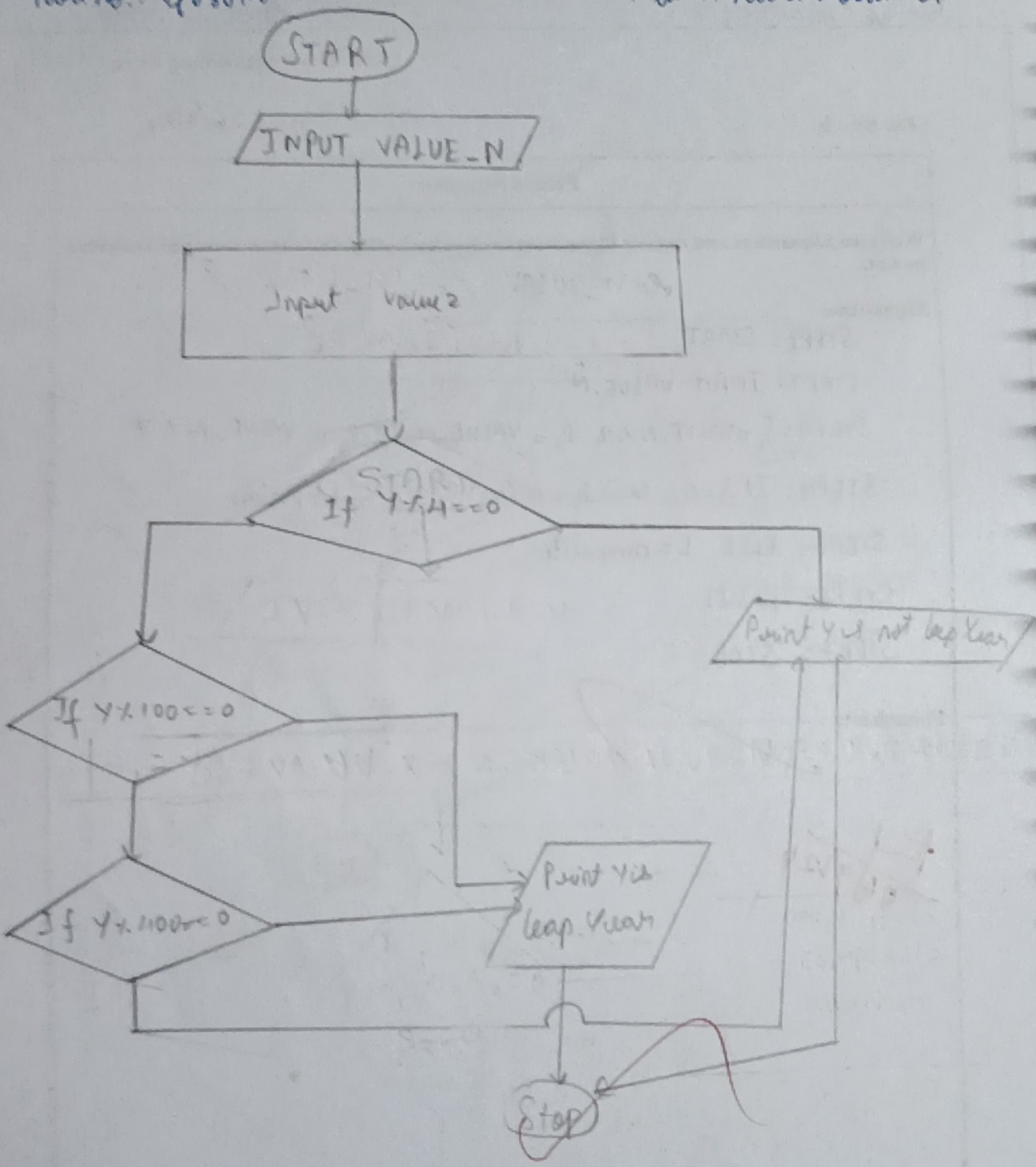
STEP 10: STOP

Flowchart:

28/9/24

Roll no.: 24080169

Name: Kuruthibalan G



Roll no: 2408011163 Name: Keerthibalan G

Ex. No.: 5 Date: 28/9/24

Palindrome Number

Write an Algorithm and draw a Flowchart to check whether the given number is palindrome number or not.

Algorithm:

STEP 1: START

STEP 2: INPUT the number n

STEP 3: Initially if:
set original = n & reversed = 0

STEP 4: while n > 0
Set digit = n mod 10
update reversed = reversed × 10 + digit
update n = n ÷ 10

STEP 5: if original = reversed
Print "Palindrome"

STEP 6: else:
print "not Palindrome"

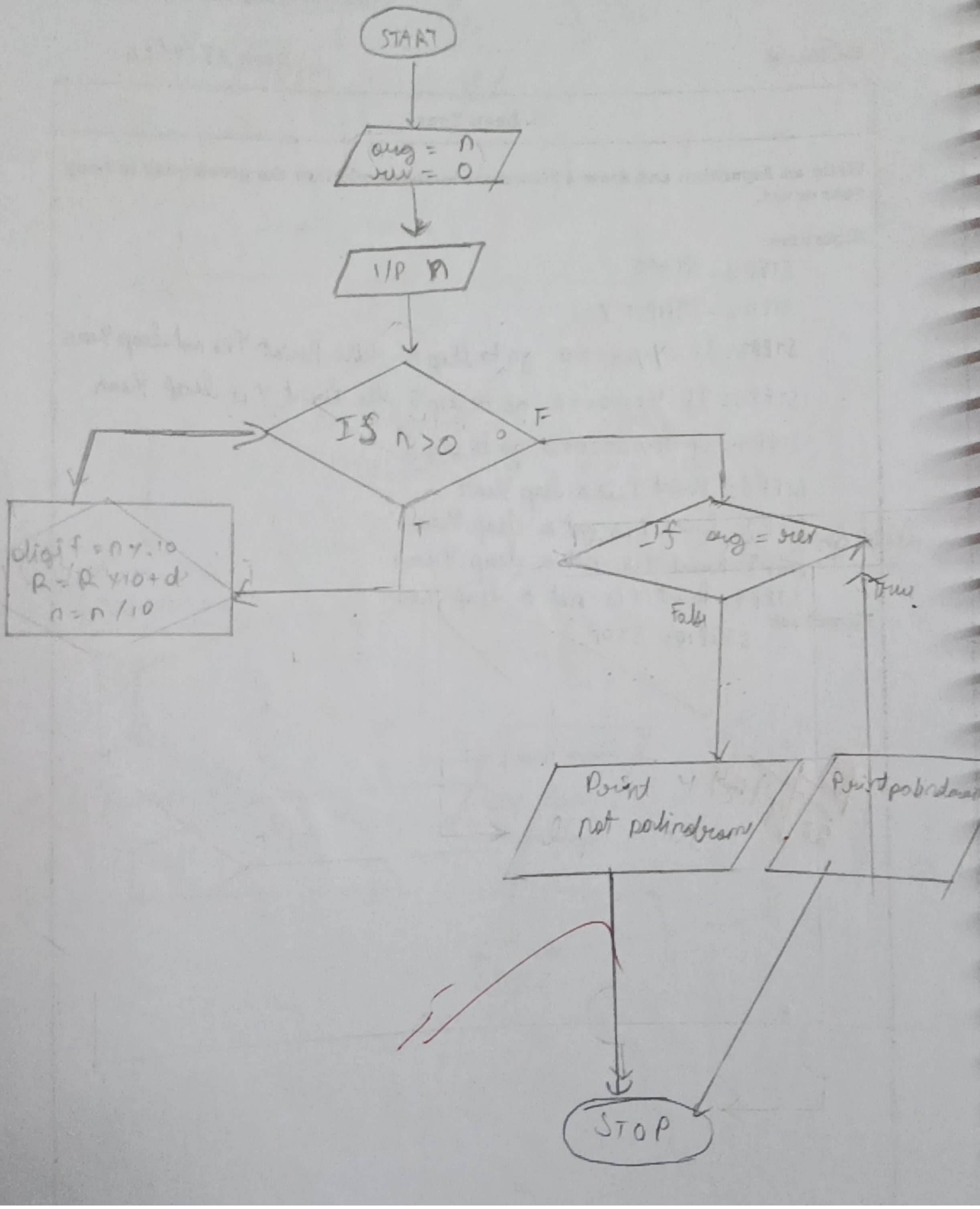
STEP 7: STOP

Flowchart:

28/9/24

Roll No: 240801163

Name: Kurthibalan G



Roll no.: 2116801163 Name: Keerthibalan G

Ex. No.: 6 Date: 28/9/24

Sum of Digits

Write an Algorithm and draw a Flowchart to calculate the sum of digits in the given number.

Algorithm:

STEP 1: START

STEP 2: I/P the number (n)

STEP 3: Initially sum = 0

STEP 4: Repeat the following Steps while n is greater than 0. n > 0

- extract the last digit of n:
  digit = n % 10
- Add the digits to sum:
  sum = sum + digit
- Remove the last digit from n:
  n = n // 10

STEP 5: O/P the sum

STEP 6: END

Flowchart:

28/9/24

Roll no.: 240801163

Name: Kuvithibalan G